



MCHE

MANCHESTER CENTRE
FOR HEALTH ECONOMICS

NEWSLETTER

IN THIS ISSUE

- Economic Impact of Reducing Sunbed Use
- Responding to the Impact of COVID-19 on Medicines Adherence In Long Term Conditions (RICOCHET)
- iHEA Special Interest Group: The Economics of Genomics and Precision Medicine
- The Use of Locum Doctors in the NHS
- Student Spotlight: Shabnam Thapa

WELCOME! FROM THE CENTRE LEAD

Welcome to the Spring edition of our MCHE Newsletter!

We are starting to see some possibility of a way through living in a global pandemic. More and more people are receiving their second vaccinations and younger members of the population are getting their first. We are all acutely aware that we are not out of the woods yet as the international effects of this pandemic continue. Our thoughts go out to people living in India especially at this awful time.

In this Newsletter we describe some new projects and ongoing projects that are starting to produce exciting results. We welcome a new PhD student, Shabnam Thapa, to MCHE who is the focus of our student spotlight. We have seen a short pause in our external seminar programme but members of MCHE continue to

contribute to national and international meetings. Later in May we welcome HTAi to 'Manchester'. The HTAi meeting will be held on-line but colleagues from MCHE have contributed to its organisation and will contribute to some presentations and panel sessions.

Very best wishes from all of us in MCHE and we all hope that you can enjoy the summer with some opportunities to be outdoors.

Katherine



CONTACT US



Manchester Centre for Health Economics
Division of Population Health, Health Services Research and Primary Care
Faculty of Biology, Medicine and Health
4th floor, Jean McFarlane Building
The University of Manchester
Oxford Road
MANCHESTER M13 9PL



[research.bmh.manchester.ac.uk / healtheconomics](https://research.bmh.manchester.ac.uk/healtheconomics)



[@HealthEcon_MCR](https://twitter.com/HealthEcon_MCR)

Centre Lead

Prof Katherine Payne
katherine.payne@manchester.ac.uk

Administrator

Matthew Ward
matthew.ward@manchester.ac.uk

ECONOMIC IMPACT OF REDUCING SUNBED USE

A project funded by the Manchester Cancer Research Centre (MCRC) focussing on understanding the impact of a public health campaign to support the removal of commercial sunbeds is nearing completion. This project involved a research team comprising epidemiologists (Prof. Adele Green), oncologists (Prof. Paul Lorigan, Prof. Richard Marais), health economists (Prof. Katherine Payne, Dr. Martin Eden, Dr. Louisa Gordon, Rob Hainsworth) and health psychologists (Dr. Tracy Epton).

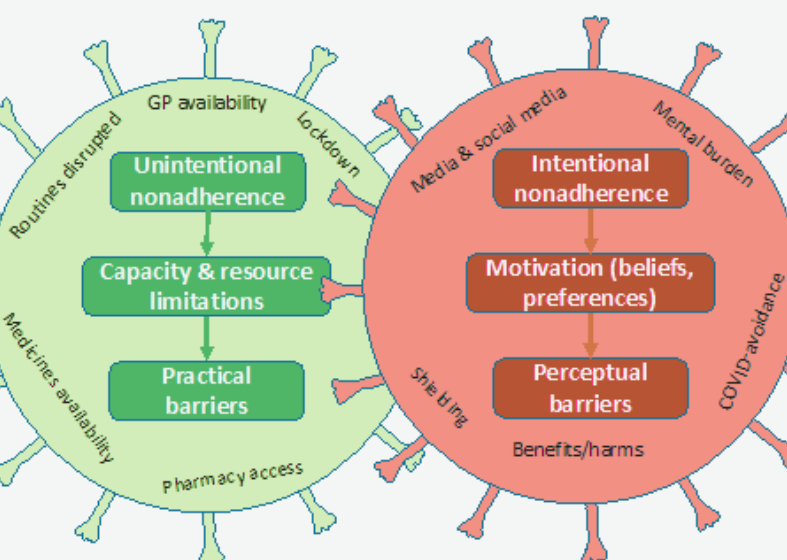
As part of this project, Rob Hainsworth developed an approach to quantify the proportion of English adolescents who have ever used sunbeds, according to age and gender. The International Agency for Research on Cancer (IARC) confirmed sunbed use as carcinogenic in 2009, and it was banned in Britain for under 18 year-olds in the same year. However, no data on prevalence has been collected since the ban. Published estimates from three sources were

compared to derive the two-yearly percentage change of sunbed use in Europe and the effects of the IARC statement including bans.

The confidence intervals for 2008 English estimates, projected to 2020 and adjusted for the ban, were used as targets to calibrate the parameters of a simple prevalence curve. Overall prevalence was split between adolescent men and women according to relative rates from published estimates. Base case estimates for mean sunbed use across genders in the 11-14 and 15-17 age groups were 0.63% and 2.35% respectively. Across the entire 11-17 age range, mean prevalence was 0.93% for men, 1.96% for women and 1.45% overall. A manuscript publishing these findings has just been accepted for publication in the journal *Children*.



“Published estimates from three sources were compared to derive the two-yearly percentage change of sunbed use in Europe and the effects of the International Agency for Research on Cancer (IARC) statement including bans.”



RESPONDING TO THE IMPACT OF COVID-19 ON MEDICINES ADHERENCE IN LONG TERM CONDITIONS (RICOCHET)

Prof. Rachel Elliott, Dr. Thomas Allen and Leonie Penner from MCHC form part of the research team on the RICOCHET project which is funded by the Manchester Academic Health Science Centre (MAHSC).

- To what extent has COVID-19 affected medicines access and consumption for LTCs?
- Which LTCs are most affected?
- What patient and provider-level characteristics are associated with reduced access and consumption?

COVID-19-related physical distancing and lockdown regulations have affected access to prescribed medicines for newly diagnosed and established long-term conditions (LTCs). It is not clear what temporary/permanent changes have been made by COVID-19 restrictions to patients' use of LTC medicines.

This project aims to answer the following specific research questions to inform a larger project application:

Methods used will involve a literature review, analysis of existing prescribing and dispensing data and de novo survey data. Synthesis of findings from Parts 1, 2 and 3 will provide important information on the temporary and more long-lasting changes associated with COVID-19-related restrictions and behaviours.

iHEA SPECIAL INTEREST GROUP: THE ECONOMICS OF GENOMICS AND PRECISION MEDICINE

This month, members of MCHE were excited to see the launch of the International Health Economics Association's (iHEA) Special Interest Group: The Economics of Genomics and Precision Medicine.

This group will be led by Dr. Ilias Goranitis (University of Melbourne), Dr. James Buchanan (University of Oxford), and Dr. Deidre Weymann (British Columbia Cancer). The special interest group will aim to "build health economics capacity, foster research connections across countries of all income levels, advance our methods, and support the international community of researchers – in particular ECRs – in generating the health economics evidence required to underpin the appropriate widespread use of genomic information in clinical practice".

A number of MCHE members provided support for the group's application including Dr. Stuart Wright who will act as the convener for organised conference sessions. We look forward to working with other researchers in the group to further research the economics of genomics and precision medicine.

ISPOR STUDENT CHAPTER

ISPOR student chapters provide a platform for students in the field of health economics and outcomes research (HEOR). The University of Manchester Student Chapter is one of the five ISPOR student chapters in the UK.

Congratulations to Shabnam Thapa for being selected for the role of President of the Manchester ISPOR student chapter.

THE USE OF LOCUM DOCTORS IN THE NHS

Dr. Thomas Allen, Research Fellow in Health Economics, and Dr. Christos Grigoroglou, Research Fellow in Health Economics, are part of a team of University of Manchester academics working on a project funded by the National Institute for Health Research (NIHR) Health Services and Delivery Research programme. The project focusses on the use of locum doctors in the NHS and aims to understand and improve the safety and quality of care.

The number of locum doctors in the NHS has grown rapidly over the last decade, and there have been widespread and sustained concerns among policymakers, healthcare providers, professional associations and professional regulators about the quality/safety, cost and effective use of locum doctors. There is little prior research on the extent of locum doctors and their practice/performance or working arrangements to confirm those concerns or to inform the development of working arrangements for locums which will assure safety and the quality of care.

The overall aim of this project is to provide evidence on the extent, quality

and safety of medical locum practice and the implications of medical locum working for health service organisation and delivery in primary and secondary care in the English NHS.

In the first half of 2021, the team will use routinely collected quantitative datasets from NHS Digital and NHS Improvement to analyse patterns of locum usage and to provide a definitive and comprehensive picture of the scale and scope of locum use in both primary and secondary care. In the second half of 2021, the team will use other existing quantitative datasets such as the Clinical Practice Research Datalink (CPRD) and electronic inpatient record system (EPR) databases to compare the clinical practice and performance of locum doctors and permanent doctors in both primary and secondary care settings. This will involve identifying locum doctors in both databases and comparing doctors' performance on prescribing activity and referrals but also on patient outcomes such as A&E attendance, unplanned hospital admissions and mortality.



“The number of locum doctors in the NHS has grown rapidly over the last decade, and there have been widespread and sustained concerns among policymakers, healthcare providers, professional associations and professional regulators about the quality/safety, cost and effective use of locum doctors.”

RECENT MCHE PRESENTATIONS AND ACTIVITIES

Eden M, Black GCM, Daker-White G, Payne K. Quantifying how individuals trade health for non-health value deriving from genomic-based diagnostic information. May 2021. European Conference on the Diffusion of Genomic Medicine: Health Economics & Policy.

Dalal G, Youn JH, Kariki E, Cootes T, Payne K. Designing a Complex Intervention Using Early Model-Based Cost-Effectiveness Analysis: A Case Study of an Artificial Intelligence-based Algorithm to Identify Vertebral Fragility Fractures. May 2021. Poster session presented at ISPOR 2021 (online)

Gavan S. Delivering Advanced Therapies at Scale: The Role of Health Economics. May 2021. Scaling up delivery of Advanced Therapies: An iMATCH Experience

Thapa S, Kissimova-Skarbek K. Economic Evaluation Of A Community-Based Lifestyle Intervention To Prevent Type 2 Diabetes In Nepal. June 2021. HTAi 2021 Annual Meeting (online)

Penner L, Elliott R, Gavan S, Peek N, Ashcroft D. Using routinely-collected data to characterise how hazardous NSAID prescribing in anticoagulated patients affects patient outcomes and healthcare costs. June 2021. HTAi 2021 Annual Meeting (online)

Gabriel Rogers will be on the HTAi panel on Health Technology Assessment and Clinical Guideline Development: Should Alignment and Synergy be a Priority for Next Generation HTA?

Grigoroglou C. The scale and scope of locum use in the English Primary Care. July 2021. Annual Health Services Research UK Conference (online)

Wright SJ, Dalal G, Eden M, Payne K. Why Do People Fail Dominance Tests? July 2021. Part of organised session: Covering New Ground In DCE Methodology. iHEA Congress (online)

IN OTHER NEWS...

Congratulations to Leonie Penner for submitting her PhD thesis • Congratulations to Professor Rachel Elliott and Dr. Elizabeth Camacho for their paper on medication errors being ranked in the top 5% of all research outputs ever tracked by Altmetric.

STUDENT SPOTLIGHT: SHABNAM THAPA



Shabnam (originally from Nepal) is a Marie Curie Innovative Training Networks (ITN) Early Stage Researcher/ PhD student at the University of Manchester. Before starting her PhD, Shabnam worked as a public health professional, researcher and youth officer in organizations such as the Norwegian Youth Red Cross in Norway and Tilganga Institute of Ophthalmology in Nepal. She has a master's degree in Public Health with specialization in health system and health economics.

Her PhD research is part of an EU-funded programme called Active Monitoring of Cancer as An Alternative to Surgery (CAST) and is a collaboration

between MCHE and the Manchester Cancer Research Centre (MCRC). Under the joint supervision of Prof. Katherine Payne from MCHE, Prof. Andrew Renehan from MCRC and Dr. Praveen Thokala from the School of Health and Related Research (SchARR), she is investigating which consequences (benefits, harms and risks) associated with the watch-and-wait strategy (a relatively new strategy of organ preservation in rectal cancer treatment) and surgery are most valued and how they are valued.

This research will provide evidence-informed value scale which will inform whether or not to adopt the watch-and-wait strategy in rectal cancer into standard care.

For more information, please visit <https://complete-response.com/valcore/>

RECENT MCHE PUBLICATIONS

Mason T, Whittaker W, Jones A, Sutton M. Did paying drugs misuse treatment providers for outcomes lead to unintended consequences for hospital admissions? Difference-in-differences analysis of a pay-for-performance scheme in England. *Addiction*. 2021 Mar 18.

Schattenberg JM, Lazarus JV, Newsome PN, Serfaty L, Aghemo A, Augustin S et al. Disease burden and economic impact of diagnosed non-alcoholic steatohepatitis (nash) in five european countries in 2018: A cost-of-illness analysis. *Liver international : official journal of the International Association for the Study of the Liver*. 2021 Feb 15.

Morgan A, Hartmanis S, Tsochatzis E, Newsome PN, Ryder SD, Elliott R et al. Disease burden and economic impact of diagnosed non-alcoholic steatohepatitis (NASH) in the United Kingdom (UK) *European Journal of Health Economics*. 2021

Wildman MJ, O'Cathain A, Hind D, Maguire C, Arden MA, Hutchings M et al. Development and evaluation of an intervention to support Adherence to treatment in adults with Cystic Fibrosis: The ActiF Research Programme. *Programme Grants Appl Res*. 2021 (in press)

Gordon LG, Hainsworth R, Eden M, Epton T, Lorigan P, Grant M, Green AC, Payne K. Sunbed use among 11- to 17-year olds and estimated number of commercial sunbeds in England with implications for a "buy-back" scheme. *Children*. 2021 (in press)

Grigoroglou C, van der Feltz-Cornelis C, Hodkinson A, Coventry PA, et al., Effectiveness of collaborative care in reducing suicidal ideation: An individual participant data meta-analysis. *Gen Hosp Psychiatry*. 2021 Apr 21;71:27-35. Epub ahead of print.

Livingstone S, Morales D, Donnan P, Thompson A, Payne K, Youn J, Guthrie B. Impact of competing mortality risks on predictive performance of the QRISK3 cardiovascular risk prediction tool in older people and those with comorbidity: external validation population cohort study *The Lancet Healthy Longevity*. 2021

Dave RV, Kim B, Courtney A, O'Connell R, Rattay T, Taxiarchi VP, Kirkham JJ, Camacho EM, Fairbrother P, Sharma N, Cartlidge CW. Breast cancer management pathways during the COVID-19 pandemic: outcomes from the UK 'Alert Level 4' phase of the B-MaP-C study. *British journal of cancer*. 2021 Mar 25:1-0.

Eden M. Developing new frameworks to value genomic information: accounting for complexity. *Personalized Medicine*. 2021 May 11

Widdows K, Roberts SA, Camacho EM, Heazell AEP Stillbirth rates, service outcomes and costs of implementing NHS England's Saving Babies' Lives care bundle in maternity units in England: A cohort study. *PLoS ONE*. 2021; 16(4): e0250150.

Patchwood E, Woodward-Nutt K, Rhodes SA, Batistatou E, Camacho E, Knowles S, Darley S, Grande G, Ewing G, Bowen A. Organising support for carers of stroke survivors (OSCARSS): a cluster randomised controlled trial with economic evaluation. *BMJ open*. 2021 Jan 1;11(1):e038777.

Dalal G, Wright S, Vass C, Davison N, Vander Stichele G, Smith CH, Griffiths CEM, Payne K. Patient preferences for stratified medicine in psoriasis: a discrete choice experiment. *British Journal of Dermatology*. 2021 (in press)